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Welcome to the NEW Chuck E. Cheese!

This new Chuck E. Cheese figure was built with care taken in the design for reliable operation, and ease of maintenance. This figure is considered to be a fairly elaborate animated figure that contains 16 individual digital functions.

THESE FUNCTIONS ARE AS FOLLOWS:

- Right Arm Swing
- Left Arm Swing
- Right Elbow Up
- Left Elbow Up
- Right Wave
- Left Wave
- Head Turn Right
- Head Turn Left
- Head Nod
- Eye Blink
- Eye Turn Right
- Eye Turn Left
- Body Forebend
- Torso Twist Right
- Torso Twist Left
- Mouth

The following maintenance sections are intended to offer a brief outline of the systems and devices employed in this figure. Its purpose is to assist maintenance personnel in performing maintenance and/or repair as required. Being a mechanical / electrical system, items are eventually bound to deteriorate. (Wear items are deemed to be primarily: bearings, cylinders, valves, and friction points.) Other wear items include: costumes, skins, and undergarments. The wear is caused by friction, age, and simple repetitive use. A dedicated program of daily and weekly checks and maintenance practices are important to keep the figure operating and costs down. If and when a part no longer performs as desired, follow the maintenance and repair procedures specified by this manual. If there is any difficulty in doing this, feel free to contact your corporate headquarters for assistance.



FIGURE MAINTENANCE **DAILY CHECK LIST**

DAILY CHECKLIST

THE FOLLOWING PROCEDURES MUST BE FOLLOWED ON A DAILY BASIS BEFORE THE FIGURES ARE TURNED ON.

- 1. FILTER / REGULATOR (VALVE BOX):**
A. Check Filter (drain water).
- 2. CHECK FIGURE FOR PROPER OPERATION.**

NOTE: Always observe and follow the manufactures maintenance recommendations for servicing and repair on these items.

BEFORE ATTEMPTING ANY MAINTENANCE PROCEDURE ON THE FIGURE OR SYSTEMS, THOROUGHLY READ ALL APPLICABLE INFORMATION AND PRECAUTIONS. CONSULT YOUR CORPORATE HEADQUARTERS FOR ASSISTANCE, IF NEEDED.



FIGURE MAINTENANCE SAFETY

THOROUGHLY READ THE FOLLOWING BEFORE OPERATING OR PERFORMING ANY MAINTENANCE PROCEDURE ON THE ANIMATRONIC FIGURE (S), SHOW ELEMENTS OR ANY OF THEIR OPERATIONAL SYSTEMS.

SAFETY

1. Maintenance should only be attempted by competent qualified personnel familiar with all systems and their components.
2. Never begin any maintenance procedure on a figure or show element unless the air, and/or electric is off.
3. When working near electrical or electronic systems, make sure power is off and avoid touching exposed electrical areas such as terminals and other points where voltage may be present.
4. Never replace any component with any other than an identical component. Cylinders and other components different than the original parts can cause extreme damage to the figure.
5. Observe all manufacturers recommendations for service, maintenance, and part replacement on system components.
6. Prior to operation, inspect show area figures and equipment for any obstructions, hazards, problems, etc.
7. Make sure the figure and all related systems are kept in a clean, moisture free environment for which they are intended.



FIGURE MAINTENANCE TROUBLE SHOOTING (cont.)

2. Hissing may also mean that a hose has slipped off of a fitting or cylinder. If this should occur, find the cylinder location and you should find both ends (look for the same color hose). If the hissing is intermittent then the line is being turned on and off by the valve.

4. MECHANICAL NOISE

1. The figure contains a number of pivot points, joints, clevises and bearings. The plastic bearings and spherical rod ends, within the figure, are normally silent. Occasionally a squeak will develop. If this should occur, a single drop of 3:1 oil, at the joint itself, will solve this problem. Do not lubricate any part of the cylinder rod of any actuator, except for the rod end spherical bearings. The seals in the actuator require special factory lubrication. Petroleum based oils or greases may ruin the seals.

5. LIMB ATTACHMENT

1. If a catastrophic failure (such as a detached limb) would occur, turn the figure off immediately. This problem may be the result of a joint pin working its way out of the clevis. After maintenance, special care must be taken when reassembling the character, being careful to use the necessary locking fasteners and Locktite where required.



FIGURE MAINTENANCE COSMETICS / COSTUME

FIGURE MAINTENANCE – CLEANING PROCEDURE

1. FACE AND HANDS (ALL SKIN AREAS)

The figure skin is made of specially formulated elastomer that is not affected by sunlight or the elements. Dust will settle on the material to some degree and should be cleaned as required. An air hose with nozzle may be used on a regular basis (daily, if required) to dust the figure. A soft, damp makeup sponge can be used to gently wipe (not scour or rub) the dust off the facial or skin areas.

Do not use any chemicals or solvents. A feather duster will also work for removing dust from skin.

2. EYEBALL CLEANING

The eyes may be cleaned, by rubbing gently with a soft cloth / cheese cloth, dampened with warm water. After they have been cleaned, they can be lightly polished to remove streaks by using a dry swab or piece of Kleenex.

Take care not to scratch the eyes in any way.

Do not rub hard or force eyelids open or closed.

3. FUR AND COSTUME AREAS

Fur areas should be dusted using an air gun and feather duster on a regular basis. Fur fabric can be gently brushed using a soft brush. Care must be taken to not harshly brush colored areas of fur -this may brush out color.

A damp sponge may be used, before brushing, to help remove dust or grime discoloration. Do not use solvents of any kind on fur materials. Costumes may be air blasted and/or feather dusted. Most costume material may be treated as normal clothing and can be dry cleaned as needed (do not wash).



FIGURE MAINTENANCE BODY FORMS / SHELLS

FIGURE MAINTANANCE – Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRICAL POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. HEAD ACCESS

Remove the baseball cap. This is attached by 2 snaps, one on each side of the hat, under the brim. Chuck E's head is split around sides (behind the ears) and is attached to the front shell with pan head screws.

Upon their removal, the rear of the head can be separated from the front. This allows access into the head for repairs. Do not remove the front of the head / face from the mechanical frame. This should not be necessary for normal maintenance.

2. COSTUME REMOVAL

The costume is split, in the back, on a central seam that allows for removal of the clothing without moving the limbs. The seams are attached with Velcro strips and must be opened carefully.

3. TORSO ACCESS

The torso mechanics can be accessed, by removing the rear half of the body shell. This is done by removing the fasteners on the clips along the seam of the shell.

4. ARM ACCESS

The arm fur is split up the back of the arm with a Velcro seam. Pull the fur out of the hand glove and split the arm all the way up. The arm fur also has an attachment point at the shoulder, using Velcro to attach it to the torso shell. The hand glove is attached with Velcro on a seam at the thumb.

5. LEG ACCESS

The leg fur is split up the back of each leg. Carefully split the fur from the bottom up. The pelvis area fur is folded over the top of the pelvis shell and Velcro'd. The fur was created to fit very tight to avoid creases and wrinkles on the characters legs. Use care and patience while re-installing the fur onto the pelvis and legs.

6. BASE ACCESS

The base is accessible by first removing the carpet covered panels under the figures feet. The valve bank is located under these panels.



FIGURE MAINTENANCE ACTUATOR REPLACEMENT

ACTUATOR REPLACEMENT- Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. ACTUATOR REPLACEMENT

ACTUATORS (CYLINDERS)

The movement of each individual function is caused by the actuator/cylinder. The actuator is constructed with only one moving part, the piston/rod assembly. As air pressure is applied to one end, the cylinder extends - moving the part in one direction. When pressure is applied to the opposite end, the cylinder retracts in the reverse direction. Air and hydraulic cylinders are constructed to last for millions of cycles. If any leakage is detected, or the cylinder fails or becomes damaged, it should be replaced. In some cases they can be repaired, but only qualified personnel should do this. Never replace any actuator with a different size, stroke, or manufacturer.

When changing out an actuator assembly, the most important issues are:

1. Replacing with the correct replacement actuator.
2. Replacing all components in the exact place, before they were removed.
3. Replacing hoses properly with correct color code.

2. FLOW RESTRICTORS

A set of colored flow control restrictors will be mounted in each line between the valve and the cylinder, one pair per function. These are usually found inside the figure a few inches from the actuator. One restrictor controls the speed that the cylinder extends, and one controls the speed that the cylinder retracts.

When replacing, it is critical that the color remains the same and the arrow on the restrictor is pointing in the direction of the actuator.

The show computer is programmed with control signals that are timed in relation to the size of the flow restrictors. If the flow restrictors are not the proper size, the timing of the figure will be incorrect, and the show will not function properly.



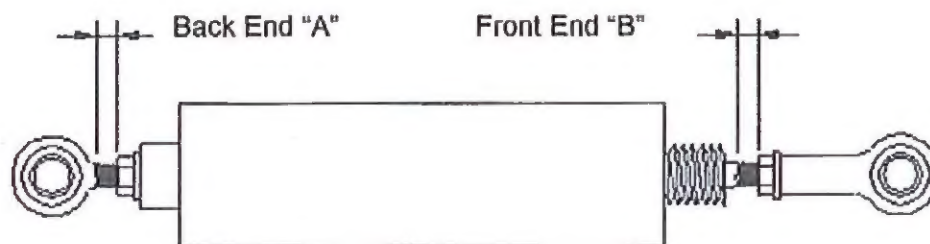
FIGURE MAINTENANCE ACTUATOR REPLACEMENT

ACTUATOR REPLACEMENT- Chuck E. Cheese

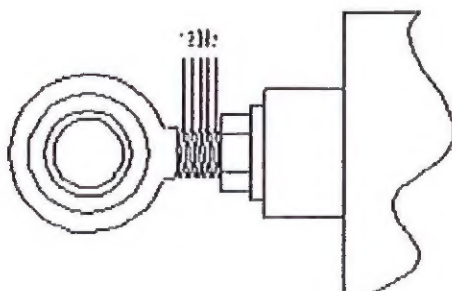
NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. ACTUATOR REPLACEMENT SCREW THREAD CALIBRATION

When replacing an actuator, it is important that the replacement has the same length from pivot center to center, as the one being removed. If this length is changed, it will affect the performance of the function and will possibly damage the character. Since the replacement actuator size is the same, adjustment can only be made by tightening or loosening the rod ends (at each end of the actuator). When removing the defective actuator, count the threads on each end, as shown below and write it down. When you replace the actuator and rod ends, make sure counts are the same. Be careful as to the correct count on the proper end, either back end "A" or front end "B". These thread counts are used when originally manufacturing Chuckie. If they are observed during replacement, your figure should remain properly calibrated.



Thread Count Example #1
5 Threads Showing



Thread Count Example #2
No Threads Showing

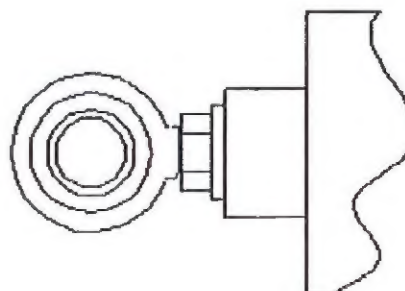




FIGURE MAINTENANCE VALVE CARDS

VALVE CARD OPERATION- Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. VALVE CARD

The valve bank contains valves that actuated by an electrical signal sent from Chuck E.'s control system. When opened by an electric signal, these valves release high-pressure air that travels into the hoses that lead to each individual figure movement. This fills the air cylinders, which then extend causing motion. When the electrical signal is removed - the air pressure is exhausted through the valve and the cylinder retracts back to its normal position.

2. CHUCK E.'S BASE

Chuck E.'s base (under his feet) contains a valve bank on which is mounted 16 individual electric air valves. When each valve is activated, an indicator lamp on that valve illuminates to show the presence of a control signal. Also, a button is provided on each valve that allows manual operation of each individual valve for testing purposes. (See valve diagram). High-pressure (80 PSI) air enters the valve manifolds on one end, and the exhaust exits the manifolds through tubes connected to an exhaust chamber. This chamber muffles the air noises so no "popping" is heard.

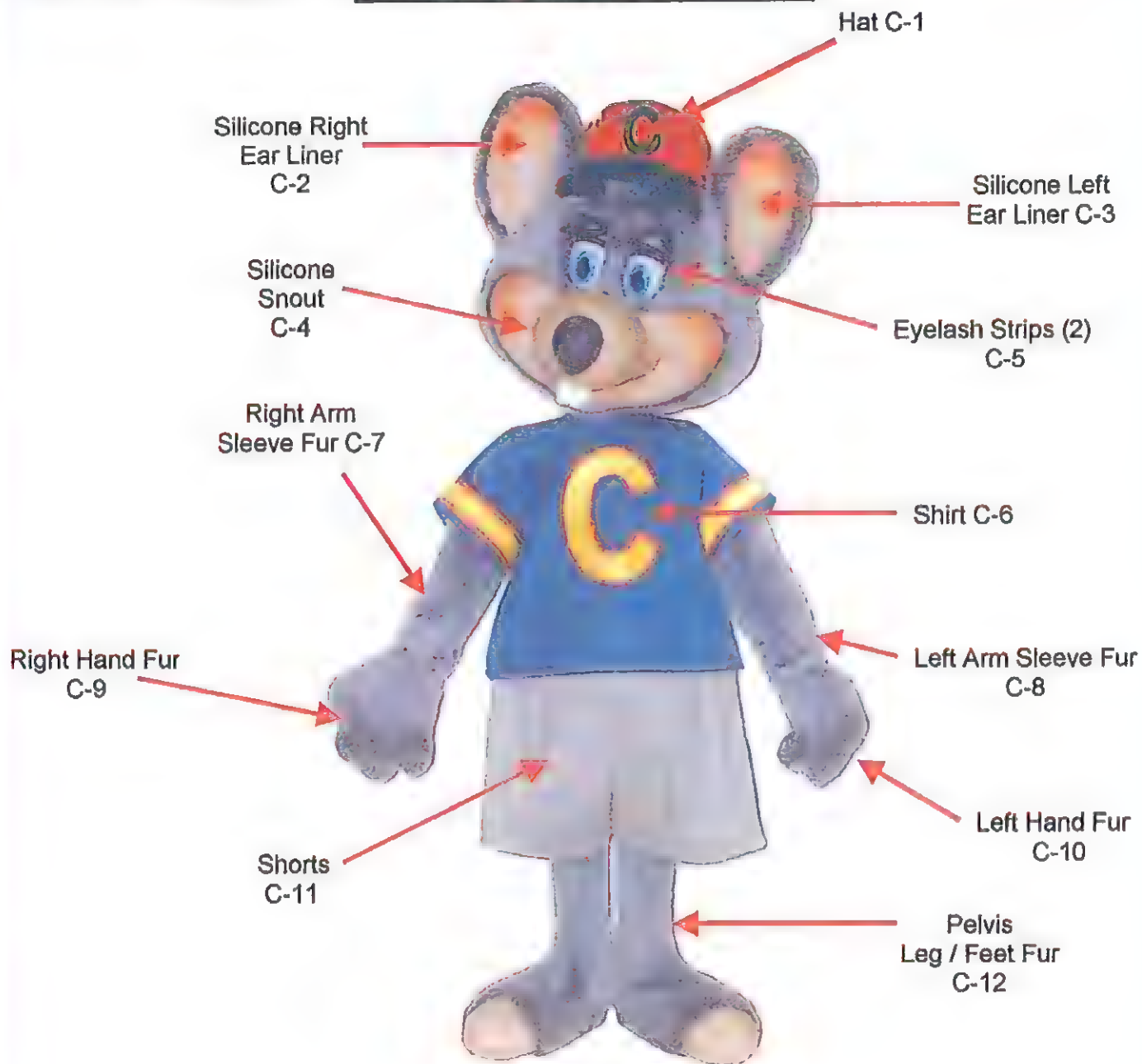
3. COMPONENT REPLACEMENT

- A. Valves that become clogged or cease to operate for any reason may be unscrewed from the manifold and replaced (see valve card component sheet). Make sure that the area is clean before removal, and during replacement.
- B. Take care when the valve is unscrewed that the rubber seal between it and the manifold is removed carefully and replaced in the correct orientation.
- C. Be careful not to over tighten the valve screws.
- D. Take care to make a good electrical connection when placing the valve pins into the terminal, and tighten the terminal screws securely.
- E. Be sure that if at any time the hoses are removed from the manifold, they are replaced to the proper port they came from observing the color code.
- F. After replacement, check for correct operation.

Chuck E. Cheese Function Wiring Chart

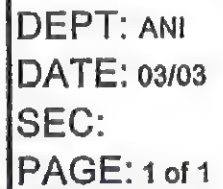
Output #	37 Pin DSub Connector Pin #	Cable Valve Card	"A" Port Hose Color	"B" Port Hose Color	"A" Orifice Color	"B" Orifice Color	Valve & Actuator #1	Function
1	1		Orange	Yellow	Blue	Blue	1	Arm swing (R)
2	2		Brown	Gray	Gray	Brown	2	Elbow up (R)
3	3		Red	Clear	Gray	Black	3	Wave (R)
4	4		Orange	Yellow	Blue	Blue	4	Arm swing (L)
5	5		Brown	Gray	Gray	Brown	5	Elbow up (L)
6	6		Red	Clear	Gray	Black	6	Wave (L)
7	7		Yellow	Orange	Blue	Blue	7	Body forward
8	8		White	Black	Gray	Gray	8	Torso twist right
9	9		Red	Clear	Gray	Gray	9	Torso twist left
10	10		Gray	Brown	Gray	Gray	10	Head turn left
11	11		Green	Blue	Gray	Gray	11	Head turn right
12	12		White	Black	Blue	Blue	12	Head up
13	13		Red	Clear	Brown	Brown	13	Mouth
14	14		Gray	Brown	Gray	Gray	14	Eye blink down
15	15		Yellow	Orange	Black	Black	15	Eye turn left
16	16		Green	Blue	Black	Black	16	Eye turn right

FIGURE / SUBJECT: Chuck E. Cheese Costume



VIEW:

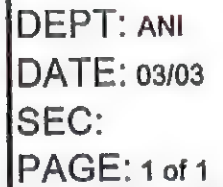
Chuck E. Cheese Character / Front View



PROJECT _____
SHOW _____
LOCATION _____

13

[illegible]



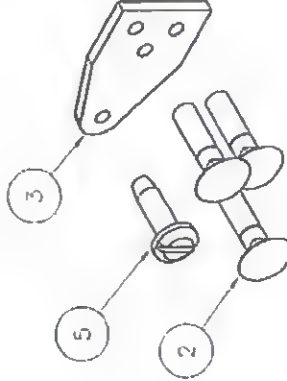
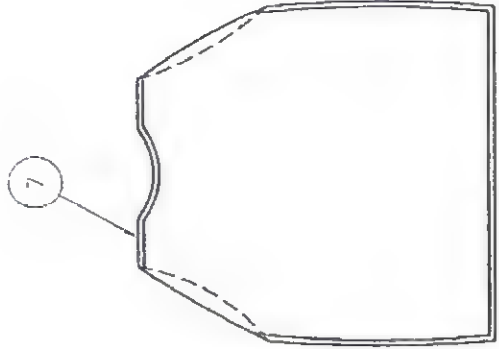
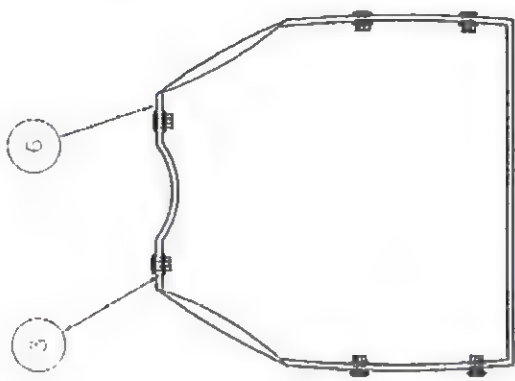
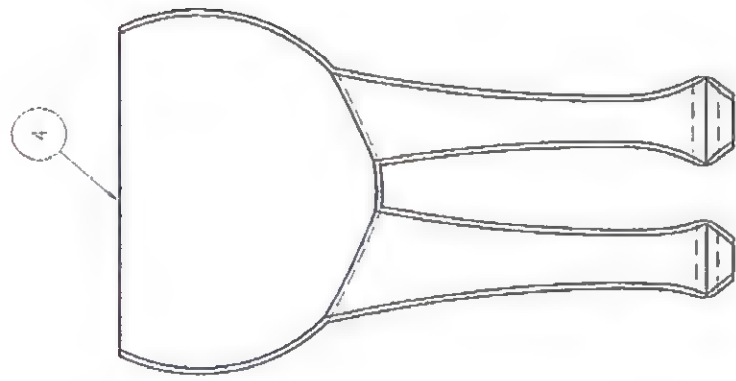
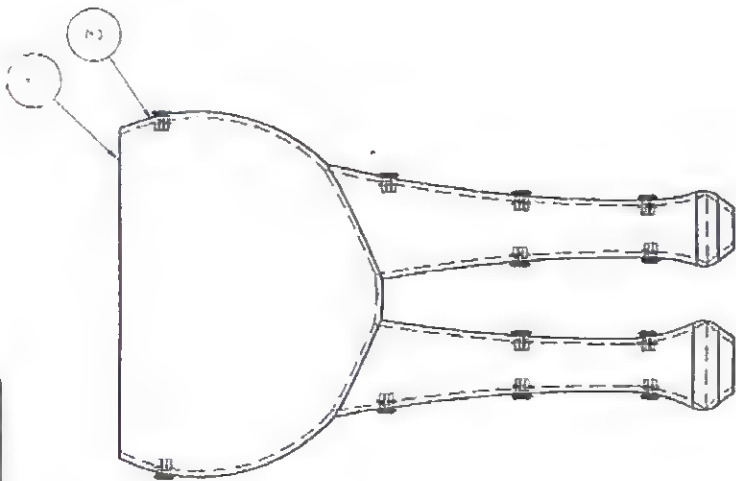
PROJECT _____
SHOW _____
LOCATION _____


15

Table 1

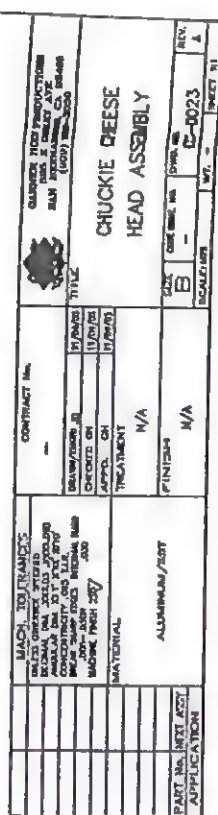
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HATCH, JILL GRACE 10115 BURGESS CIRCLE BIRMINGHAM, AL 35244-2100 TEL: 205/992-1100 COMMUNITY AT THE BAY 101-102 NORTH FISH CRY	CONTRACT NO. -	 GARBNER-HIRST PRODUCTIONS P.O. BOX 7, CONLEY AVE. ATLANTA, GA 30341 (404) 770-7070	TITLE SHELL, LEGS	DATE 11/2/88	REV. A
DRAWING NO. 01	SHEETS 01	SHEETS 01	SHEETS 01	SHEETS 01	SHEETS 01
PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS
PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS	PROJECT SHELL, LEGS
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CHUCK E. CHEESE BODY SHELLS PARTS LIST





CHUCK E. CHEESE HEAD PARTS LIST

DEPT: ANI
DATE: 03/03
SEC:
PAGE: 1 of 3

CLIENT Chuck E. Cheese Entertainment
GATE _____
SCENE _____

PROJECT _____
SHOW _____
LOCATION _____

NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
H-1	Head Frame Post	1		8TC-0781	
H-2	Snout Frame Assy.	1		8TC-0782	
H-3	Head Shell Mount Crossbar	1		8TC-0783	
H-4	Jaw Pivot Side Plates	2		8TC-0784	
H-5	Head Nod Clevis Block	1		8TC-0785	
H-6	Lower Jaw Lever Assy.	1		8TC-0786	
H-7	Eye Blink Clevis Block	1		8TC-0787	
H-8	Jaw Cylinder Clevis Block	1		8TC-0788	
H-9	Socket Head Cap Screw	4	8-32 x 3/8	8TC-0789	
H-10	Socket Head Cap Screw	2	10-24 x 1/2	8TC-0916	
H-11	Socket Head Cap Screw	8	6-32 x 5/8	8TC-0911	
H-12	Upper Head Nod Clevis	1	MP 159	8TC-0621	
H-13	Head Nod Cylinder	1		8TC-0790	
H-14	Mouth Cylinder	1		8TC-0791	
H-15	Eye Blink Cylinder	1		8TC-0792	
H-16	Eye Turn Cylinder	1		8TC-0793	
H-17	Socket Head Cap Screw	2	8-32 x 1/4	8TC-0794	
H-18	Jaw Pivot Pin	1		8TC-0795	
H-19	Head Shell Mount Angle Bracket	3		8TC-0796	
H-20	Washer	11	#10	8TC-0638	
H-21	Socket Head Cap Screw	3	10-24 x 3/8	8TC-0915	
H-22	Socket Head Cap Screw	10	10-24 x 5/8	8TC-0917	
H-23	Jaw Pivot Igus Bushing	2	PP 455	8TC-0432	
H-24	Socket Head Cap Screw	2	1/4-20x1 1/2	8TC-0857	
H-25	Nod Igus Bushing	2	PP 458	8TC-0434	
H-26	Socket Head Cap Screw	2	1/4-20 x 1 1/4	8TC-0891	
H-27	Socket Head Cap Screw	2	10-24 x 1 1/4		
H-28	Head Nod Pivot Pin	1	MP 345	8TC-0797	
H-29	Socket Head Cap Screw	2	10-24 x 1"	8TC-0919	
H-30	Socket Head Cap Screw	2	1/4-20 x 7/8	8TC-0929	



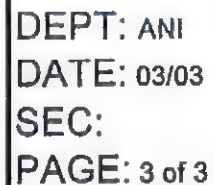
CHUCK E. CHEESE HEAD PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
GATE _____
SCENE _____

PROJECT _____
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NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
H-31	Eye Blink Lever	1	MP 876	STC-0486	
H-32	Eye Assy. Plate	1		STC-0798	
H-33	Eye Blink and Turn Clevis Block	2	MP 875	STC-0486	
H-34	Eye Plate	2	MP 877	STC-0497	
H-35	Eye Blink Clevis Arm	4	MP 873	STC-0483	
H-36	Eyelid Plate	2	MP 874	STC-0484	
H-37	Eyeblink Pivot Pin	1		STC-0799	
H-38	Socket Head Cap Screw	4	6-32 x 1/2"	STC-0910	
H-39	Eye Turn Pivot Pin	2	MP 887	STC-0497	
H-40	Socket Head Cap Screw	8	10-24 x 5/8"	STC-0917	
H-41	Short Eye Turn Lever	1	MP 872	STC-0482	
H-42	Long Eye Turn Lever	1	MP 871	STC-0481	
H-43	Eye Turn Linkage Threaded Rod	1	6-32x3 3/4"	STC-0800	
H-44	Eye Turn Igus Bushing	4	PP 447	STC-0429	
H-45	Rod End	2	PP 100	STC-0459	
H-46	Socket Head Cap Screw	4	5-40 x 1"	STC-0801	
H-47	Eyelid Shell	2		STC-0367	
H-48	Button Head Cap Screw	16	4-40 x 3/16"	STC-0875	
H-49	Eyeball Shell	2		STC-0366	
H-50	Socket Head Cap Screw	2	8-32 x 1/2"	STC-0913	
H-51	Socket Head Cap Screw	1	1/4-20 x 1"	STC-0929	
H-52	Spacer	2	1/4"	STC-0802	
H-53	Spacer	1	1/2"	STC-0803	
H-54	Rod End	2	PP 101	STC-0460	
H-55	Jam Nut	4	6-32	STC-0895	
H-56	Nylon Locknut	3	5-40	STC-0894	
H-57	Bushing	2	PP 456	STC-0433	
H-58	Truss Phil Machine Screw	3	10-32 x 1/2"	STC-0886	
H-59	Socket Head Cap Screw	2	1/4-28 x 1"	STC-0804	
H-60	Nylon Locknut	2	1/4-28	STC-0903	

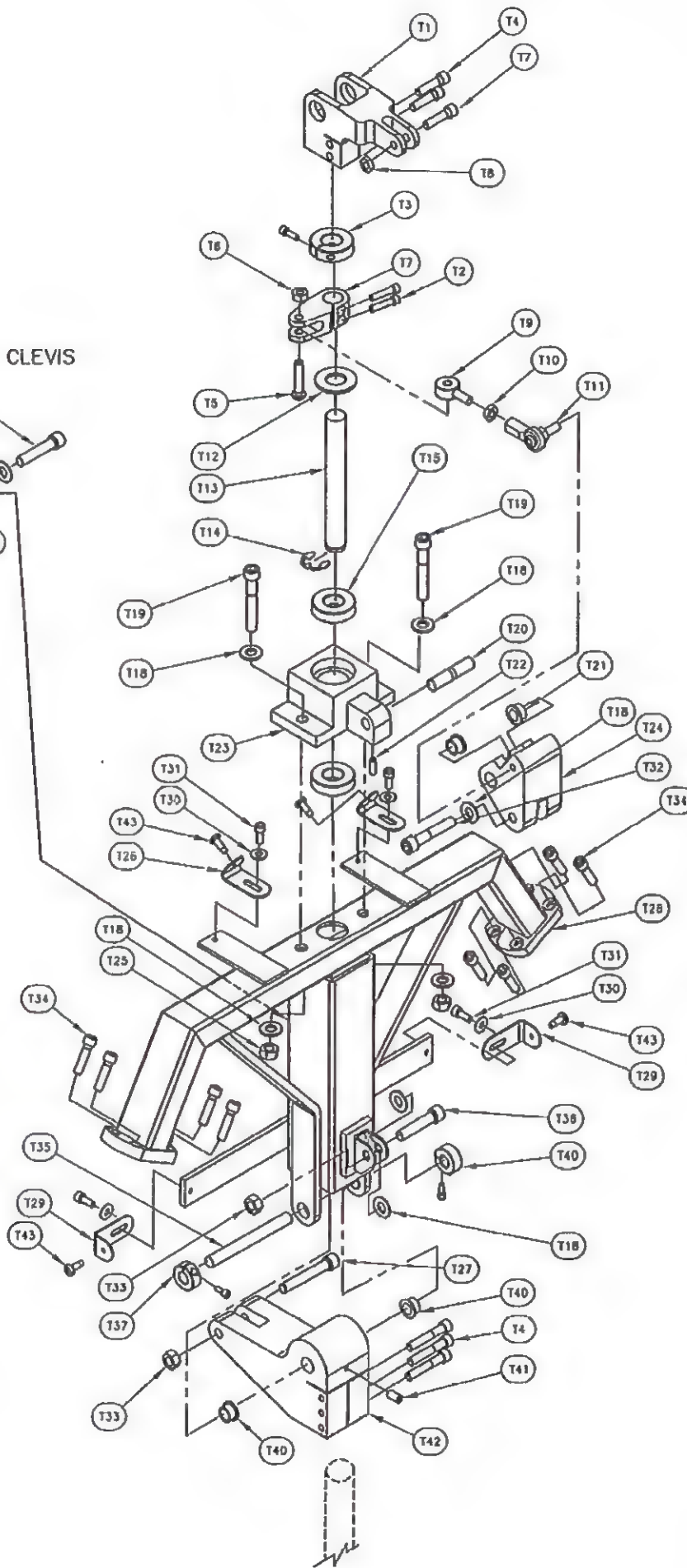


PROJECT _____
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FOREBEND CLEVIS



PART NO. 1001 557		MATERIAL		FINISH		TOLERANCE	
APPLICATION		SEE BOM		SEE BOM		SEE BOM	
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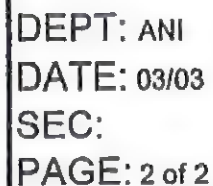
CHUCK E. CHEESE TORSO PARTS LIST

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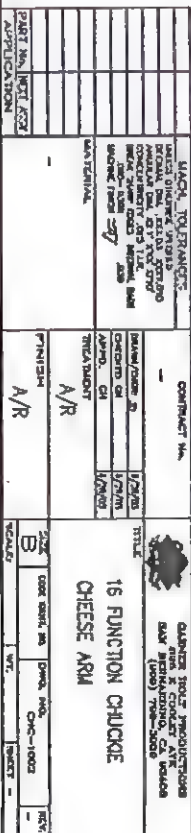
CLIENT Chuck E. Cheese Entertainment
GATE _____
SCENE _____

PROJECT _____
SHOW _____
LOCATION _____

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
T-1	Head Nod Clamp Block	1		8TC-0805	
T-2	Socket Head Cap Screw	2	10-24 x 5/8"	8TC-0917	
T-3	1 pc. Clamp Shaft Collar	1		8TC-0806	
T-4	Socket Head Cap Screw	5	1/4-20 x 1 1/4"	8TC-0807	
T-5	Button Head Cap Screw	1	1/4-28 x 1"	8TC-0808	
T-6	Head Turn Clamp Lever	1		8TC-0809	
T-7	Socket Head Cap Screw	1	1/4-28 x 1"	8TC-0810	
T-8	Nylon Thin Locknut	2	1/4-28	8TC-0904	
T-9	Male Rod End	1	PP 107	8TC-0463	
T-10	Jam Nut	1	1/4-28	8TC-0903	
T-11	Female Stud Rod End	1		8TC-0811	
T-12	Shaft Spacer	1		8TC-0812	
T-13	Head Turn Shaft	1		8TC-0813	
T-14	E Ring	1		8TC-0814	
T-15	Head Turn Shaft Bearing	2	PP 406	8TC-0476	
T-16	Head Turn Cylinder	1		8TC-0896	
T-17	Body Forward Cylinder	1		8TC-0815	
T-18	NAS Washer	9	5/16	8TC-0642	
T-19	Socket Head Cap Screw	2	5/16-24 x 2"	8TC-0816	
T-20	Bell Crank Pivot Pin	1	MP 351	8TC-0474	
T-21	Bell Crank Bushing	2	PP 456	8TC-0433	
T-22	Set Screw	1	10-24 x 5/16"	8TC-0817	
T-23	Head Turn Bearing Block	1		8TC-0818	
T-24	Bell Crank Block	1		8TC-0819	
T-25	Nylon Thin Locknut	2	5/16-24	8TC-0633	
T-26	Upper Body Shell Angle Bracket	2		8TC-0407	
T-27	Hex Head Cap Screw	1	5/16-24 x 2 1/4"	8TC-0820	
T-28	Torso Weldment	1		8TC-0821	
T-29	Lower Body Shell Angle Bracket	2		8TC-0407	
T-30	Washer	4	#10	8TC-0776	



PROJECT _____
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CHUCK E. CHEESE ARM PARTS LIST

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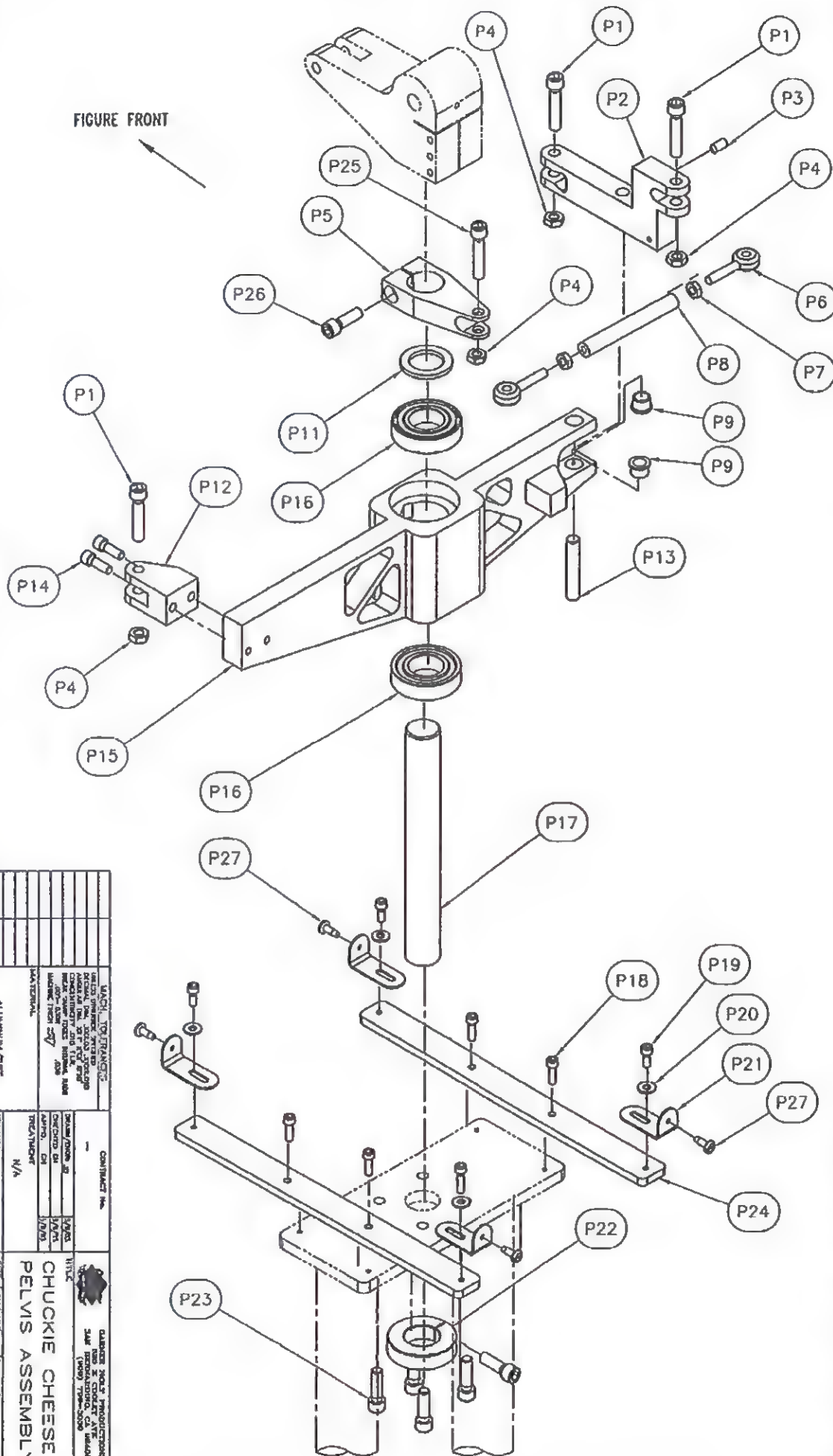
CLIENT Chuck E. Cheese Entertainment
GATE _____
SCENE _____

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NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
A-1	Arm Swing Cylinder	1	CY 52	STC-0380	
A-2	Buttonhead Allen Cap Screw	2	10-24 x 1/2"	STC-0916	
A-3	Washer	2	#10	STC-0775	
A-4	Arm Swing Bumper	2	PP 203	STC-0468	
A-5	Right Arm Swing Bumper Block	1	MP 834 R	STC-0546	
A-6	Left Arm Swing Bumper Block	1	MP 834 L	STC-0546	
A-7	Nylon Locknut	1	1/4-28	STC-0629	
A-8	Socket Head Cap Screw	2	1/4-20 x 1"	STC-0824	
A-9	Elbow Pivot Block	1	MP 816	STC-0577	
A-10	Socket Head Cap Screw	1	1/4-28 x 1 1/4"	STC-0861	
A-11	Elbow Pivot Pin	1	MP 831	STC-0542	
A-12	Arm Plate Spacer	1	MP 836	STC-0547	
A-13	Elbow Pivot Bushing	2	PP 455	STC-0432	
A-14	Buttonhead Allen Cap Screw	2	10-24 x 5/8"	STC-0917	
A-15	Lower Arm Plate	2		STC-0828	
A-16	Elbow Cylinder Trunnion Bushing	2		STC-0431	
A-17	Left Hand Plate	1		STC-0532	
A-18	Elbow Cyl. Trun. Bushing Washer	2		STC-0826	
A-19	Elbow Cyl. Trunnion Shoulder Bolt	2		STC-0826	
A-20	Buttonhead Allen Cap Screw	4	8-32 x 5/8"	STC-0914	
A-21	Arm Plate Spacer / Wrist Post	1		STC-0827	
A-22	Wrist Wave Pivot Block	1	MP 820	STC-0531	
A-23	Set Screw	1	6-32 x 1/4"	STC-0648	
A-24	Socket Head Cap Screw	2	8-32 x 1/2"	STC-0913	
A-25	Wrist Wave Clevis Bushing	2	PP 450	STC-0430	
A-26	Buttonhead Allen Cap Screw	2	10-32 x 1/2"	STC-0886	
A-27	Wrist Wave Clevis Pin	1	MP 852	STC-0513	
A-28	Wrist Wave Clevis	1	MP 533	STC-0590	
A-29	Nylon Thin Locknut	6	10-32	STC-0900	
A-30	Socket Head Cap Screw	1	10-32 x 3/4"	STC-0923	

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FIGURE FRONT



MACH. TO FINANCE		CONTRACT NO.		DANGER: NO. 1 PROTECTING HARD & CORROD. AT 140000 2400 (TYPE) (TYPE) (TYPE) (TYPE)	
MILKES, CHEMICAL, WETTED MILKES, CHEMICAL, WET					



CHUCK E. CHEESE PELVIS ASSEMBLY PARTS LIST

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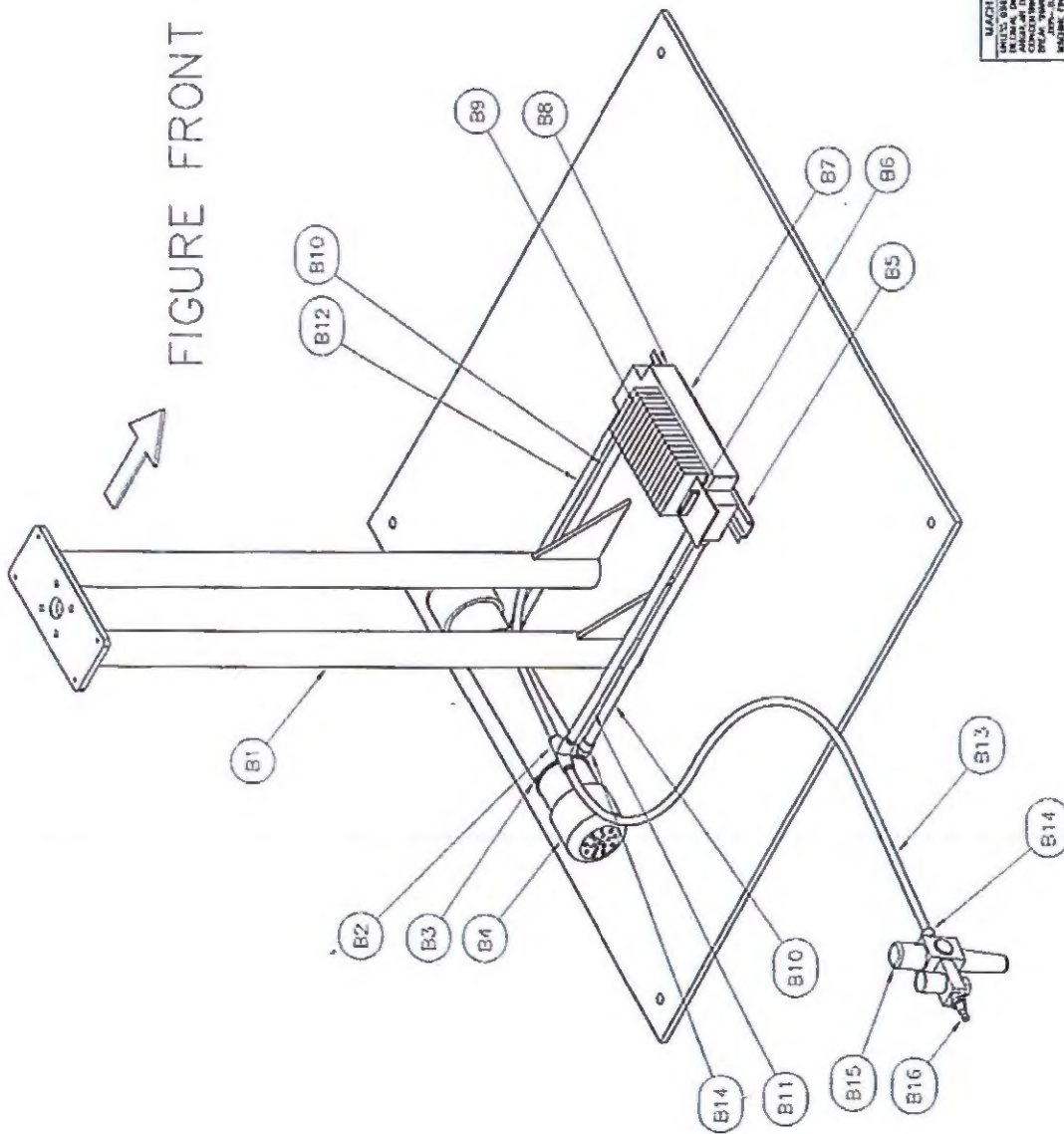
CLIENT Chuck E. Cheese Entertainment
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NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
P-1	Socket Head Cap Screw	3	5/16-24 x 1 1/2"	STC-0871	
P-2	Torso Twist Lever	1	MP 803	STC-0564	
P-3	Set Screw	1	10-24 x 1/4"	STC-0832	
P-4	Nylon Locknut	4	5/16-24	STC-0632	
P-5	Clamping Lever	1	MP 936	STC-0453	
P-6	Male Rod End	2	PP 109	STC-0464	
P-7	Jam Nut	2	5/16-24	STC-0631	
P-8	Connecting Rod	1	MP 842	STC-0503	
P-9	Bushing	2	PP 456	STC-0433	
P-10	Torso Twist Cylinder	1		STC-0833	
P-11	Shaft Spacer	1	MP 856	STC-0516	
P-12	Cylinder Clevis	1	MP 881	STC-0491	
P-13	Pin	1	MP 351	STC-0474	
P-14	Socket Head Cap Screw	2	1/4-20 x 3/4"	STC-0928	
P-15	Pelvis Block	1		STC-0834	
P-16	Bearing	2	PP 410	STC-0477	
P-17	Shaft	1	MP 853	STC-0514	
P-18	Socket Head Cap Screw	4	10-32 x 1/2"	STC-0886	
P-19	Socket Head Cap Screw	4	10-24 x 1/2"	STC-0916	
P-20	Washer	4	#10	STC-0776	
P-21	Angle Body Shell Clip	4		STC-0407	
P-22	Shaft Collar	1	PP 507	STC-0568	
P-23	Socket Head Cap Screw	4	5/16-18 x 1"	STC-0864	
P-24	Body Shell Mount Plate	2	MP 838	STC-0549	
P-25	Socket Head Cap Screw	1	5/16-24 x 1 1/4"	STC-0870	
P-26	Socket Head Cap Screw	1	5/16-18 x 1 1/4"	STC-0836	
P-27	Truss Phil Machine Screw	4	10-32 x 1/2"	STC-0886	
P-28					
P-29					
P-30					

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	01/11/88	W. J. GARNER	INITIAL RELEASE
2	01/11/88	W. J. GARNER	REVISIONS TO BE DESCRIBED IN DISPOSITION COLUMN
3	01/11/88	W. J. GARNER	DISPOSITION
4	01/11/88	W. J. GARNER	DISPOSITION



MACH TO TRANCELS 10000 LINDSEY AVE. COMMERCE, CALIF. 90040 (213) 261-1111 FAX (213) 261-1112		GARNER BOLT PRODUCTIONS 10000 LINDSEY AVE. COMMERCE, CALIF. 90040 (213) 261-1111 FAX (213) 261-1112	
CONTRACT NO. -		TITLE ASSY, BASE AND VALVES	
QUANTITY 1000		DATE 01/11/88	
APPROVED BY W. J. GARNER		DATE 01/11/88	
TREATMENT N/A		FINISH N/A	
MATERIAL N/A		SCALE CC-1010	
REV A		DATE 01/11/88	



CHUCK E. CHEESE BASE & VALVES ASSY. PARTS LIST

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NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
B-1	Base / Legs Weldment	1		STC-0836	
B-2	3/8" "T" Tube Fitting	1		630-0040-01	
B-3	Wire Tie / Adhesive Pad	2		RCB-0001	
B-4	Exhuast Muffler	1		STC-0837	
B-5	Din Rail	1		STC-0838	
B-6	Connector Interface Card	1		STC-0839	
B-7	Velcro Mount Strips	2		STC-0840	
B-8	Valve Manifold Assembly	1		STC-0841	
B-9	Valve	16		STC-0842	
B-10	5/16" Exhaust Tube	2		STC-0843	
B-11	5/16" Air Feed Tube / Short	1		STC-0844	
B-12	5/16" Air Feed Tube / Long	1		STC-0845	
B-13	5/16" Regulator Tube	1		STC-0846	
B-14	5/16" Straight Tube Fitting	2		STC-0847	
B-15	Valve / Filter / Regulator	1	Includes gauge	STC-0473	
B-16	Q.C. Fitting	1		STC-0848	
B-17					
B-18					
B-19					
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CHUCK E. CHEESE ACTUATOR AND PARTS LIST

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NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
ACT-1	Arm Swing Right Actuator	1	RFKSS-IAH0008	STC-0380	
ACT-2	Elbow Up Right Actuator	1	RFKSS-IAH0010 ~	STC-0693	
ACT-3	Wave Right Actuator	1	US21381	STC-0831	
ACT-4	Arm Swing Left Actuator	1	RFKSS-IAH0008 •	STC-0380	
ACT-5	Elbow Up Left Actuator	1	RFKSS-IAH0010	STC-0693	
ACT-6	Wave Left Actuator	1	US21381	STC-0831	
ACT-7	Body Forward Actuator	1	US21380	STC-0815	
ACT-8	Torso Twist Right and	X		STC-0833	
ACT-9	Torso Twist Left Actuator	1	US15388	STC-0833	
ACT-10	Head Turn Left and	X		STC-0695	
ACT-11	Head Turn Right Actuator	1	US21663	STC-0695	
ACT-12	Head Up Actuator	1	US21382	STC-0790	
ACT-13	Mouth Actuator	1	US15381	STC-0791	
ACT-14	Eye Blink Down Actuator	1	US21381	STC-0792	
ACT-15	Eye Turn Left and	X		STC-0793	
ACT-16	Eye Turn Right Actuator	1	US15389	STC-0793	
OR-BL	Blue Orifice	10	F-2815-201 B80	STC-0938	
OR-GR	Gray Orifice	10	F-2815-161 B80	STC-0939	
OR-BR	Brown Orifice	10	F-2815-251 B80	STC-0940	
OR-BK	Black Orifice	10	F-2815-121 B80	STC-0941	
RE-1	Rod End (MW5)	2	Torso Twist L/R	STC-0465	
RE-2	Rod End (MM5)	4	Bdy Frwd., Hd Turn L/R	STC-0464	
RE-3	Rod End (MM4)	6	Elbow L/R, Head Up, Mouth	STC-0694	
RE-4	Rod End (MM3)	6	Wave L/R, Eyeblink Down	STC-0461	
RE-5	Rod End (MM2)	2	Eyeturn L/R	STC-0460	

NOTE: 1. All actuators are sold without rod ends.
2. All actuators include hose fittings.

